product user guide

mabey hire
all the support you need

Title	Issue	Date
Road Plates	5	April 2014

1. Introduction

This user guide is intended to provide basic information for users of Mabey Hire Road Crossing Plates. Mabey Road Crossing Plates are intended to provide temporary vehicular access over narrow trenches and small manholes. They are not intended for other purposes.

In all applications the user should ensure that the sides of the trench to be crossed are adequately shored to support the reactions from the Road Crossing Plates when under service loading.

The user should also ensure that the units are adequately restrained against longitudinal or lateral movement. In certain applications the user may have to make his own separate arrangements for adequate handrails / kerbs.

2. Code of Practice for Safety at Street Works and Road Works

The above code of practice states that road crossing plates being used for street works or road works should have a skid resistant surface. Mabey Hire Limited have road crossing plates available with an anti skid surface (listed separately in the tables below). These plates should only be used for street / road works applications and NOT off-road or where tracked vehicles are in use.

3. Design

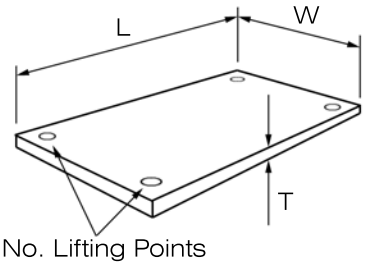
No information on design is included in this publication. Users may need to employ a competent engineer to confirm that the plates are suitable for their application.

4. Identification : Sizes and Weights of Units

Road Plates are available in two types : Imperial sized and Metric Sized. The code number for each plate is welded onto each unit. Suggested lifting chain is a 7mm 4 leg sling which is available from Mabey Hire Limited. Product code : PSP-155/SH with weight 24Kg. Refer to Lifting Chain user guide for further information.

Imperial Sized PLates

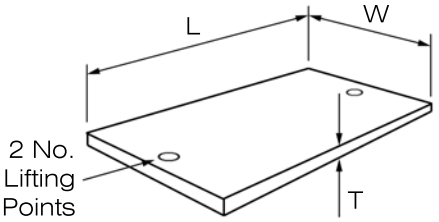
Tolerance on plan size is +11" (L and W)
i.e. An 8'x4' plate may be up to 8'11"x4'11"



Thickness 'T' varies between 17-22mm		
Code	Nominal Dims. L x W (ft)	Max. Weight (Kg)
RCP4X3	4'x3'	320
RCP4X4	4'x4'	400
RCP5X3	5'x3'	384
RCP5X4	5'x4'	480
RCP5X5	5'x5'	576
RCP6X3	6'x3'	448
RCP6X4	6'x4'	560
RCP6X5	6'x5'	672
RCP6X6	6'x6'	784
RCP7X3	7'x3'	512
RCP7X4	7'x4'	640
RCP7X5	7'x5'	768
RCP7X6	7'x6'	896
RCP7X7	7'x7'	1024

Thickness 'T' varies between 17-22mm		
Code	Nominal Dims. L x W (ft)	Max. Weight (Kg)
RCP8X3	8'x3'	576
RCP8X4	8'x4'	720
RCP8X5	8'x5'	864
RCP8X6	8'x6'	1008
RCP9X3	9'x3'	640
RCP9X4	9'x4'	800
RCP9X5	9'x5'	960
RCP9X6	9'x6'	1120
RCP10X3	10'x3'	704
RCP10X4	10'x4'	880
RCP10X5	10'x5'	1056
RCP10X6	10'x6'	1232
Anti Skid Plate		
RCP8X4-AS	8'x4'	752

Metric Sized Plates



Code	Nominal Dims. L x W (m)	Max. Weight (Kg)	Thickness 'T' (mm)
RDPL1020	2.0x1.0	310	20
RDPL1225	2.5x1.25	490	20
RDPL1535	3.5x1.5	820	20
RDPL2012	2.0x1.25	393	20
RDPL2025	2.5x2.0	780	20
RDPL2030	3.0x2.0	940	20
RDPL2530	3.0x2.5	1175	20
RDPL4020	4.0x2.0	1260	20
RDPL4025	4.0x2.5	1570	20
Heavy Duty Road Crossing Plates			
HDPL1527	2.75x1.5	810	25
HDPL2712	2.75x1.2	673	25
HDPL2720	2.7x2.0	1078	25
HDPL2727	2.7x2.7	1482	25
HDPL3020	3.0x2.0	1176	25
HDPL3025	3.0x2.5	1470	25
Anti Skid Plate			
RPAS1020	2.0x1.0	310	20
RPAS1525	2.5x1.5	626	20
RDAS2512	2.5x1.25	522	20
RDAS2535	3.5x2.5	1457	20
RPAS3020	3.0x2.0	1000	20
RPAS4020	4.0x2.0	1342	20

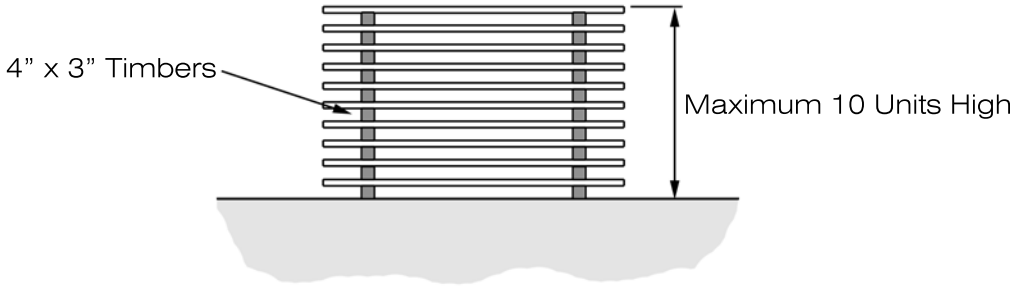
5. Stacking and Handling

Suitable firm level storage areas should be made available on site for stacking.

Suitable lifting equipment of adequate capacity should be provided for off-loading and installation.

Slinging should always be carried out by suitably experienced and competent personnel. The weight of each unit is given overleaf.

Units should be stacked on 4"x3" timbers, to a maximum of 10 No. high depending on size, weight and storage area.



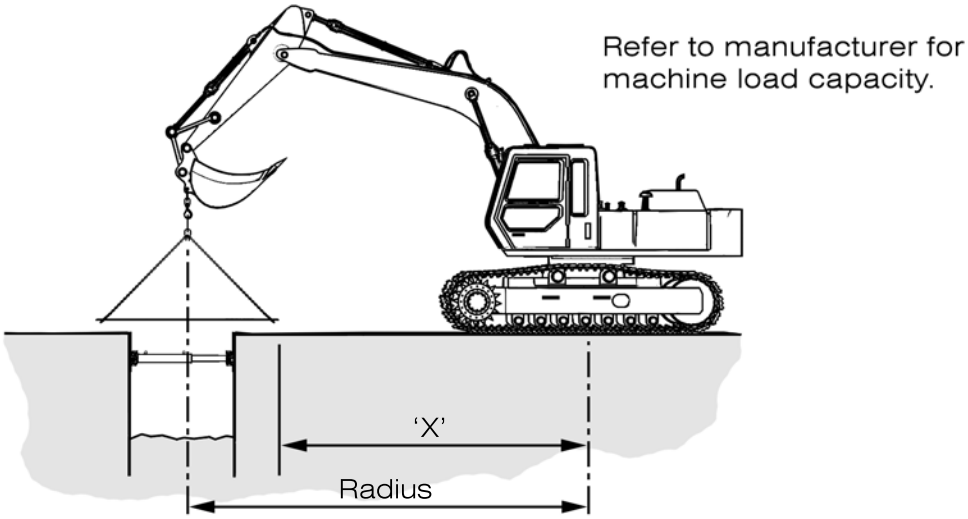
6. Transportation

Ensure that the plates are securely restrained to the vehicle bed.

7. Installation

7.1 Excavator or crane lifting requirements when positioning units over narrow trench.

‘X’ = Dimension from rear of unit to centre line of crane / excavator when standing a safe distance from the trench.



Max Lift = Unit Weight + Weight of Chains (see Page 1 part 4)
Radius = 1/2 length of unit + ‘X’

7.2 Method of Installation (Dismantling is the reverse procedure)

Simply crane into position onto the previously prepared foundation.
When in position, ensure units are adequately restrained against movement.
Install asphalt toe ramps or similar if required.
Install kerbs or handrails as appropriate.

8. In-Service Checks

Regularly inspect the trench walls to ensure the trafficked units are not overloading them. Check that the units are not moving longitudinally or laterally.

9. General

Since our policy is one of continual improvement, components may vary in detail from the description given in this publication.